On Protecting Unassigned Addresses

discussion summary and analysis

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Objectives of SAVI

- IP spoofing threats of two types
  - impersonation
  - concealment

- existing protection insufficient
  - too coarse
  - IPv4-only
  - not standardized

- SAVI to fill the gap
Threats Target Different Address Pools

- **Assigned to others**
- **Unassigned**
  - Subject to impersonation
- **On-link addresses**
  - Legitimate
  - OK

Enabling concealment
Address Pools Not Always Distinguishable

- impersonation protection always possible
- concealment protection requires DHCP

- need address assignment authority

- ask around
  - assigned to others
  - unassigned

- OK to use
Existing Solutions Well Suited

- FCFS best fit for Stateless Autoconfiguration
  - extra robustness through reactive binding

- CPS best fit for DHCP
  - concealment prevention through drop on absence of binding

- each in separate document?